

***Medical Division  
Bulletin No. 1***

# EMERGENCY MEDICAL SERVICES FOR CIVILIAN DEFENSE



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***United States Office of Civilian Defense  
Washington, D. C.***

# OFFICE OF CIVILIAN DEFENSE

WASHINGTON, D. C.

## Medical Provisions for Civilian Defense

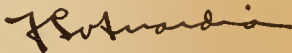
The activities of the U. S. Office of Civilian Defense are concerned primarily with the protection of lives and property in the event of enemy action. To its Medical Division is entrusted the responsibility for the preparation of plans for Civilian Defense designed to prevent or alleviate the medical and public health hazards to which the civilian population may be exposed.

This bulletin is the first of a series of recommendations to State and Local Directors of Civilian Defense concerning the augmentation of medical facilities in their area. It presents a simple basic plan for the organization of Emergency Medical Field Units related to hospitals, which can be adapted to the needs of any community. It directs attention to the possible future requirements for expansion of hospital facilities both within a community and outside its boundaries. To this end, it recommends the immediate preparation of a local inventory, a report of which should be filed in duplicate with the Regional Office of Civilian Defense. It also recommends that steps be initiated in each local area for the rapid expansion of nursing facilities through intensive training of adequate numbers of nursing auxiliaries.

To those who do not as yet appreciate the need for action, I should like to quote from a similar official bulletin issued in England in 1938 just prior to the beginning of hostilities, which describes measures for safeguarding the civilian population:

"The need for [these measures] is not related to any belief that war is imminent. It arises from the fact that the risk of attack from the air, however remote it may be, is a risk that cannot be ignored, and because preparations to minimize the consequences of attack from the air cannot be improvised on the spur of the moment but must be made, if they are to be effective, in time of peace."

Whether or not we regard danger to the lives and the property of our people as imminent, I would urge that immediate steps be taken to carry out these recommendations of the Office of Civilian Defense in every State along our seaboard and in industrial areas in the interior.



F. H. LaGUARDIA,  
*U. S. Director Civilian Defense.*

WASHINGTON, D. C.  
July 30, 1941

# EMERGENCY MEDICAL SERVICES



## UNITED STATES OFFICE OF CIVILIAN DEFENSE

Dupont Circle Building - - Washington, D. C.

### REGIONAL OFFICES

#### FIRST CIVILIAN DEFENSE REGION

101 Milk Street, Boston, Massachusetts

#### SECOND CIVILIAN DEFENSE REGION

111 Eighth Avenue, New York City

#### THIRD CIVILIAN DEFENSE REGION

1554 Baltimore Trust Building, Baltimore, Maryland

#### FOURTH CIVILIAN DEFENSE REGION

First Floor Hurt Building, Atlanta, Georgia

#### FIFTH CIVILIAN DEFENSE REGION

427 Cleveland Avenue, Columbus, Ohio

#### SIXTH CIVILIAN DEFENSE REGION

20 N. Wacker Drive, Chicago, Illinois

#### SEVENTH CIVILIAN DEFENSE REGION

620 World Herald Building, Omaha, Nebraska

#### EIGHTH CIVILIAN DEFENSE REGION

Room 1014 Majestic Building, San Antonio, Texas

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# Emergency Medical Services for CIVILIAN DEFENSE

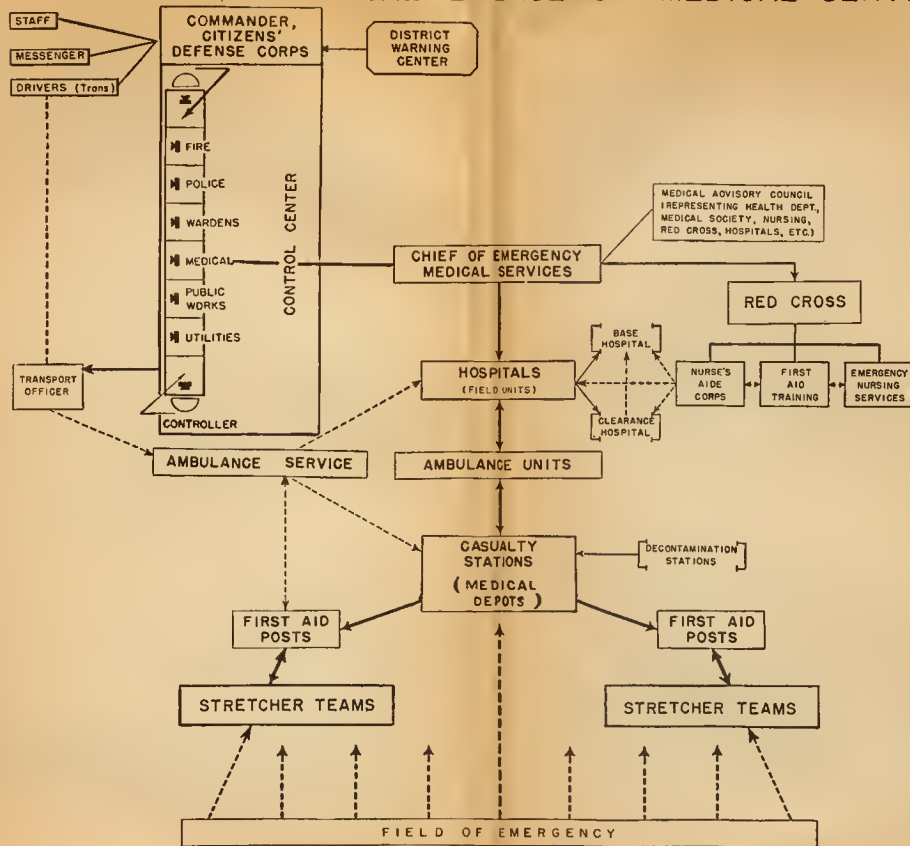
CURRENT developments in techniques of warfare leading to unheralded bombing of civilian populations as well as potential hazards from sabotage, make imperative the preparation of facilities for providing medical service to casualties that may result from such incidents. The organization of these emergency facilities must be a fundamental part of our Civilian Defense program. It is the purpose of this bulletin to outline the essentials of an Emergency Medical Service and to describe a type of organization by which these essentials may be achieved.

The Medical Division of the Office of Civilian Defense is charged with the preparation of plans for emergency medical service. It maintains liaison with other Federal agencies concerned with public health and medical care. An officer of the United States Public Health Service has been assigned to each Regional Office of Civilian Defense to assist State and local defense councils in the organization of Emergency Medical Services. In addition, the United States Public Health Service liaison officer attached to the Army Corps Area Headquarters has been designated to serve as medical consultant to the Civilian Defense Regional Office (see map).

Because of geographical and administrative diversity in various parts of the country, general plans are presented as recommendations to State and local defense councils for adaptation to meet the needs of the different regions. The general adoption of a common pattern in organization and equipment for civilian defense is highly desirable so that adjacent communities may pool or exchange emergency resources in time of need.

Local administrative areas for civilian defense will frequently extend beyond municipal or other political boundaries. Such administrative civilian defense areas may be defined by State Defense Councils. It is important that the Emergency Medical Services be integrated at all administrative levels with welfare, police, and other emergency services and with the Red Cross.

# ORGANIZATION OF LOCAL EMERGENCY MEDICAL SERVICES



ON THE YELLOW WARNING, THE CHIEF OF E. M. S., OR HIS DEPUTY, REPORTS AS MEDICAL ADJUTANT TO THE COMMANDER OF THE CONTROL CENTER. ON BLUE OR RED WARNING, HOSPITAL FIELD UNITS PREPARE FOR ACTION, BUT DO NOT MOVE TO CASUALTY STATIONS OR FIRST AID POSTS UNTIL ORDERED BY CONTROL CENTER.

## I. LOCAL CHIEF OF EMERGENCY MEDICAL SERVICE.

An Emergency Medical Service should be organized as a section of the local defense organization in each area under a director responsible to the local Director of Civilian Defense. It is recommended that the local Chief of Emergency Medical Service be a physician of broad experience and administrative capacity, such as a health officer or

an experienced hospital administrator. It should be his first duty to make an inventory of the community's medical resources and facilities, and to prepare local plans, develop an organization, and provide for the training of personnel to carry out the functions of the Emergency Medical Service outlined below.

## II. LOCAL MEDICAL ADVISORY COUNCIL ON CIVILIAN DEFENSE.

The local Chief of Emergency Medical Service should be Chairman of a Medical Advisory Council. This Council might well include the local health officer, an experienced hospital administrator, a physician recommended by the local medical soci-

ety because of his technical experience and executive ability, a registered nurse, and a representative of the American National Red Cross and other voluntary agencies.

## III. EMERGENCY MEDICAL FIELD UNITS.

In States on both seaboards and in vulnerable industrial areas in the interior, general hospitals, both voluntary and governmental, including Veterans' Administration Facilities and the Marine Hospitals of the United States Public Health Service, should organize Emergency Medical Field Units and assemble basic equipment. An Emergency Medical Field Unit should consist of two or more squads, and a physician should be appointed to

command the entire unit. Squad leaders, in turn, should be designated. The size of the Emergency Field Unit should be in proportion to the bed capacity of the parent hospital. All members of Field Units should be instructed in first aid,\* including care of burns, prevention of shock, control of hemorrhage, emergency treatment of fractures and wounds, and in transportation of the injured.

### A. Personnel.

**1. SMALL SQUADS:** In hospitals of less than 200 beds, it is recommended that the Emergency Field Unit consist of two squads, one for each 12-hour shift of the day. Each squad should be composed of two physicians, two or more nurses, and two or more orderlies or nurses' aides, and be capable of functioning, if necessary, as two separate teams. At least one Unit of this size is advisable for a population up to 25,000.

**2. LARGE SQUADS:** In hospitals of more than 200 beds the Emergency Field Unit should consist of two squads of four doctors, four or more nurses, and four or more orderlies or nurses' aides, one of the physicians in each squad to act as squad leader. Each of the squads should be on first call during a

12-hour period of the day. The personnel and equipment of a squad should be divisible into four teams, capable of functioning if necessary at separate sites of disaster. At least one Unit of this size or two Units with small squads are advisable for populations up to 50,000.

**3.** In hospitals of more than 350 beds the Emergency Field Unit should consist of four or more large squads, each headed by a squad leader and capable of functioning, if necessary, as multiple teams. In these large hospitals at least two squads should be on call during each 12-hour period of the day, alternating on first call on alternate days. An Emergency Field Unit of four large squads or two

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\*Advanced First Aid course prepared by the Office of Civilian Defense in collaboration with the American National Red Cross.

Units of two large squads each are advisable for a population of 100,000.

4. It will be advisable to organize physicians and nurses engaged in private practice in the area into reserve Emergency Field Units related to hospitals. In areas with no hospitals and in hospitals whose resident staffs cannot be depleted, the primary Emergency Unit of a hospital may be made up in whole or in part of practitioners from the community.

## B. Transportation.

A hospital ambulance, station wagon, small truck, or passenger vehicle will be adequate to transport the personnel of a squad and their equipment when dispatched by the Control Center to a site previously designated for the establishment of a Casualty Station. After return trips to the hospital with casualties such vehicle will be available for transportation of additional squads and equipment if required. Hospitals which do not maintain an ambulance service will find it necessary to provide for transportation, utilizing private or municipal ambulance services, small vehicles of the police, fire, or other municipal departments, station wagons, or passenger cars. Special racks can be installed in private ambulances and in station wagons and small trucks so that they may be utilized in an emergency for the transportation of four or more stretcher patients at a time.

Private vehicles recruited for ambulance purposes by the American National Red Cross or other agency should be assigned to a hospital or to a designated parking center under the control of a transport officer in the Control Center.

## C. Medical and Surgical Equipment.

The medical and surgical equipment for a squad should consist of a working supply for each physician's team and a reserve supply of sterile dressings and equipment in drums or packs from which the working supplies of the teams may be replenished. The working supply of each team is best carried in a portable bag, box, or haversack. A list indicating minimum equipment is available in Bulletin No. 2, "Equipment and Operation of Emergency Medical Field Units."

The provision of working supplies for each physician in a separate container will permit the squad of a Casualty Station to split off teams of one physician and assistants who can be dispatched to set up subsidiary First Aid Posts close to the site of disaster.

## D. Casualty Stations and First Aid Posts.

Upon arrival at the site of a disaster, the squads of the Emergency Medical Units which have responded to the call of the Control Center will set up Casualty Stations at the sites designated by the local Director of Civilian Defense. The location of a Casualty Station should provide safety, shelter, and accessibility. Stretchers, cots, and blankets will be transported to the Casualty Station from the Medical Depot. Until relieved by the Control Center, the physicians and nurses of the Emergency Medical Unit should remain at their station, to which the injured will be directed or transported on stretchers by Stretcher Teams enlisted for this purpose. The work of the Casualty Station is to be limited to emergency first aid procedures—the relief of pain, prevention of shock, control of hemorrhage, care of burns, application of simple splints and of surgical dressings and, not least, the preservation of morale by the establishment of confidence. The seriously injured will be evacuated as rapidly as possible by ambulance or other vehicle to a hospital. Those with minor injuries will go to their homes or to temporary shelters.

If necessary, the squad leader in charge of a Casualty Station may split off one or more teams of one physician and assistants, dispatching them to set up subsidiary First Aid Posts at other sites.

It will be advisable for the local Chief of Emergency Medical Service to prepare a spot map of the area to indicate all out-patient clinics, health centers and their substations, and all police and fire stations or other sites which could serve in an emergency as Casualty Stations. He should also maintain an inventory of available transportation.

## E. Decontamination Stations and Gas Defense.

These subjects are discussed in separate publications of the Office of Civilian Defense—"First Aid in the Prevention and Treatment of Chemical Casualties" and "Protection Against Gas."

## **F. Rescue Squads and Stretcher Teams.**

Rescue Squads are groups of men organized under the Fire Services who are responsible for the extrication of persons trapped in collapsed or demolished buildings. Members are trained in first aid and are able and equipped to render minimal care for casualties pending the arrival of the First Aid Team.

After their removal from points of special danger by the Rescue Squads, casualties should be turned over to Stretcher Teams of Medical Auxiliaries, which will transport them to First Aid Posts or Casualty Stations. Casualties not requiring stretcher transport should be directed to a Casualty Station.

## **G. Medical Depots.**

Medical Depots for the storage of collapsible cots, blankets, and stretchers should be established and the sites indicated on the spot map of the community. Unless these items are located at a Casualty Station they should be dispatched to the site by the transport officer in the Control Center.

Eight stretchers, 24 cots, and 64 blankets should be available per 10,000 population. Two pairs of saw horses, each 36 inches high, should be available for each Casualty Station. Stretchers placed on the horses may be used as dressing tables.

## **H. Records.**

Identification tags should be affixed to the injured by the Rescue Squad or else immediately upon arrival at the Casualty Station or First Aid Post. A record should be kept in the Casualty Record Book,

which should be standard equipment for each medical team. The record should include the name, address, person to be notified, diagnosis, first aid administered, morphine, if given, and disposition. A form approved by the Medical Division of the Office of Civilian Defense will be found in Bulletin No. 2, "Equipment and Operation of Emergency Medical Field Units." A nurse or nurse's aide should be assigned the responsibility for these records. Using a red skin pencil, the letters *TK* or *U* should be drawn on the forehead of the casualty indicating the presence of a tourniquet or the necessity for priority attention.

## **I. Drills.**

It is recommended that drills be called at each hospital every week by the unit leader. A record of each drill should be kept by him, which will show the time required for complete mobilization of a squad at the designated point of departure and the condition of equipment.

It is also recommended that field drills for each unit be called unexpectedly by the local Director of Civilian Defense. Each field drill might appropriately include other units of the Citizens' Defense Corps. The official in command at the drills should inspect the clothing, equipment, and transportation of all participating units and render a report to the Chief of Emergency Medical Service and to the local Director of Civilian Defense upon the promptness and efficiency of each unit. The larger field drills might include the Canteen and other Emergency Relief Services of the Welfare Department or of the local chapter of the American Red Cross or other local agency.

# **IV. BASE AND EVACUATION OR CLEARANCE HOSPITALS.**

In order to prepare for the release of hospital beds within the area for large numbers of casualties, the Chief of Emergency Medical Service should make an inventory of hospitals, convalescent homes, and other institutions within a radius of 50 or more miles, to which maternity services, children's wards, certain categories of the hospitalized sick, and convalescents could be transported. Provision should also be made for the assembly and storage of an adequate supply of hospital cots, mattresses, blankets, and other equipment which may be required to provide for emergency increase in

bed capacity of voluntary and governmental hospitals. In the event of actual destruction of hospitals, it may become necessary to consider evacuating casualties to Base Hospitals and transforming hospitals near the scene into Evacuation or Casualty Clearance Hospitals.

Upon receiving the first emergency call, the hospital should order all members of its visiting staff by telephone or police radio call to report to the hospital and stand by for the care of the injured received from the Casualty Stations and First Aid Posts.



## V. AUGMENTATION OF NURSING SERVICES.

In the face of the need for rapid expansion of nursing services for civilian defense, the number of available nurses is being depleted because of the requirements of the military forces and the public health and industrial hygiene services. An attempt is being made to compensate for this deficiency by the training of subsidiary hospital workers through the NYA, WPA, and other programs. The Office of Civilian Defense in collaboration with the American National Red Cross has revised the instruction curriculum for Volunteer Nurses' Aides, so as to provide for a period of intensive practical instruction in hospitals under the direction of a special instructor in charge of the training and use of Volunteer Nurses' Aides. Upon

completion of this practical training, Volunteer Nurses' Aides will become eligible to assist nurses in wards and out-patient clinics of hospitals, or in visiting nurse, public health, industrial hygiene, and school health services. Volunteer Nurses' Aides are intended to supplement the work of the nurse, so that she may be able to serve a greater number of patients. It is recommended that the local Chief of Emergency Medical Service in collaboration with hospital executives and directors of schools of nursing reorganize and intensify the training and the use of Volunteer Nurses' Aides in appropriate hospitals in accordance with the new schedule of the Office of Civilian Defense and the American National Red Cross.

## VI. FIRST AID.

First aid instruction should be provided for as large a part of the general population as possible. The local Chief of Emergency Medical Service should, in collaboration with the local chapter of the American National Red Cross, provide training in first aid for at least 5 percent of the personnel of all municipal departments and large business and industrial establishments. Upon completion of training, this 5 percent should constitute the first aid detachment of their municipal department, business, or factory group. The leaders of these detachments should be encouraged to take the Instructor's Course of the American National Red Cross so that, when qualified, their services might be utilized for the extension of first aid instruction to all employees and to the general population of the community.

The First Aid Course for Civilian Defense prepared by the American National Red Cross in col-

laboration with the Office of Civilian Defense is recommended for first aid training. Instructors qualified by the Red Cross may give the training under the direction of the local chapter of the American Red Cross, the local health department, or any other voluntary or governmental agency.

An intensive course of practical training (five 2-hour lessons) has been prepared by the Medical Division of the Office of Civilian Defense and the American National Red Cross as supplementary instruction for members of Emergency Medical Field Units and for nursing auxiliaries and members of other Civilian Defense Units (police officers, firemen, and volunteer auxiliaries) who have had previous instruction in first aid. It is designed as a refresher course for the purpose of reviewing and practicing those first aid procedures which are most important in Civilian Defense.



**Emergency Medical Services for Civilian Defense**  
*United States Office of Civilian Defense*  
*Washington, D. C.*